





# JOURNAL OF SOLUTION CHEMISTRY

Vol. 15, No. 1	CONTENTS	January 1986
<hr/>		
Investigation of Behavior of Polystyrene in $\alpha$ -Naphthol, Acetone, and Methylene Chloride: Solution Calorimetry B. Brumer and R. Cohen		1
<hr/>		
Excess Volume and Compressibility Changes of Monofluoromethane with Normal Alkanes at 293 K B. G. Foxon, E. F. Cleary, and E. C. Wilton		25
<hr/>		
Self-Diffusion Coefficients of Benzene in Organic Solutions as Determined from Ultrasonic $\alpha$ Relaxation Experiment by a Computer Simulation Model P. G. Janssen and the Authors of the Journal and Conference		35
<hr/>		
Partial Molar Volume in Organic Solutions of Nucleosides, DNA, and RNA B. Kaban		45
<hr/>		
Acid-Base and Hydrophobic Interactions in the Aqueous Solution of Hydrogen Bonding B. Kaban and I. Kaban		55
<hr/>		
Application of the Pitzer-Debye-Huckel Theory: Part I. Mixtures of $n$ -Alkanes with Ethanol, Compounds, Benzene, Cyclohexane and $n$ -Hexane T. M. Lister and J. Mann		65
<hr/>		
Application of the Pitzer-Debye-Huckel Theory: Part II. Mixtures of $n$ -Alkanes Compounds, Benzene, $n$ -Hexane, Cyclohexane, with 1,1-Dichloroethane and 1,2-Dichloroethane T. M. Lister and J. Mann		75
<hr/>		
Application of the Pitzer-Debye-Huckel Theory: Part III. Mixtures of $n$ -Alkanes Compounds, Benzene, $n$ -Hexane, Cyclohexane, with 1-Cyclohexene, Cyclohexene, $\alpha$ -Cyanobenzene and Benzene T. M. Lister and J. Mann		85
<hr/>		
Index		95

**Thermodynamic Aspects of Binding and Relative Permeation**by Thomas and Judith M. Weiss, *State Univ. of Oregon*

101

J. M. Weiss and J. M. Weiss, *State Univ. of Oregon***Solute Structure and Chemical Shift Theory**

Independence and Ambiguity (pp. 124)

123

A. L. Davis, P. M. Hare and P. M. Hare

**From Experimental to Theoretical Solvent Potentials of**

Some Hydrophobic Solutes in Aqueous Solutions

139

J. P. Hwang, P. A. Thiel, B. A. Hwang, and J. P. Hwang

**Solute Thermal Expansion and Reduced**

Compressibility Relationships in Water, and in Ethanol at 25 and 40°C

147

J. M. Weiss and J. M. Weiss, *State Univ. of Oregon***Behavior of Carboxylic Acids in Water: Experimental and**

Theoretical Solvent Potential Relations

159

J. M. Weiss and P. M. Hare

**Thermodynamic Properties of Organic Solvents**

A Partial Solvent Potential and Heat Capacity of Aqueous Solutions of Some Small Molecules

169

J. P. Hwang and J. P. Hwang

**Behavior of Long Chain Fatty Acid Esters in Aqueous**

Solutions: Theoretical and Experimental Relations

179

J. M. Weiss

**Thermodynamic Properties of Organic Solvents**

A Partial Solvent Potential

189



<b>Statistical Mechanism/Reaction of Ethanol and 1,2-Dibromofluoroethane in Mixtures in Gaseous and Liquid Phases</b>	189
<b>in Hydrogen L. Chiriac-Cl., and L. Leclercq (CNRS) Experimental Study of the Mechanism of the Gaseous Phase Ethanol Bromination</b>	197
<b>in Mixtures of Ethanol and 1,2-Dibromofluoroethane in Gaseous and Liquid Phases</b>	205
<b>Application of Statistical Theory of the Statistical Theory to Ethanol Bromination Reaction in the Gaseous Phase in Mixtures</b>	213
<b>A Statistical Model for the Ethanol Bromination in Mixtures</b>	221
<b>A. Chiriac-Cl., L. Leclercq, and L. Chiriac</b>	
<b>The Effect of Temperature on the Kinetics and Order of Reaction in Ethanol Bromination Reaction</b>	229
<b>A. Chiriac-Cl., L. Leclercq, and L. Chiriac</b>	
<b>Kinetic Study of the Reaction of Ethanol and Hydrogen Peroxide in Gaseous Phase</b>	237
<b>in Gaseous Phase</b>	
<b>A. Chiriac-Cl., L. Leclercq, and L. Chiriac</b>	
<b>in Gaseous Phase</b>	
<b>A. Chiriac-Cl., L. Leclercq, and L. Chiriac</b>	

# JOURNAL OF SOLUTION CHEMISTRY

Vol. 20, Nos. 1-2	CONTENTS	July, 1992
<hr/>		
Heat Capacities, Volumes and Enthalpies of Fused to Liquid Surface Interactions	101	
H. Otsuka, H. Otsuka, and T. Otsuka		
Crystallization of Highly-ordered Polymers Induced by Solids in Water	111	
H. Otsuka		
The Kinetics of the First Molecular Permeation Coefficients of Ethyl Ethyl Sulfonate	121	
H. Otsuka and T. Otsuka		
Apparent Heat of Fusion and Relative Volumes of Aggregates of Polyethylene Glycol EG and PEG 40	131	
T. Otsuka, H. Otsuka, and T. Otsuka		
Linear Free Energy Relationship of the Energy of the CTTA Transition of Methyl Red with the Solvent-Structure Parameter $\sigma$	141	
H. Otsuka, H. Otsuka, and T. Otsuka		
Thermodynamic and Kinetic Parameters of Hydrogen-Bonded Complexes of $\alpha$ -Cyanic Acid	151	
T. Otsuka, H. Otsuka, T. Otsuka, H. Otsuka, J. A. Otsuka, H. Otsuka, T. Otsuka, T. Otsuka, J. A. Otsuka, H. Otsuka, and T. Otsuka		
Activity Coefficients for Aqueous NaCl and NaOH from Solubility Data up to 20°C: A Supplement to Hansen's Data	161	
H. Otsuka		
The Conductivity of Concentrated Aqueous Solutions of Sodium Hydroxide at 25°C	171	
H. Otsuka, H. Otsuka, and T. Otsuka		
Energy-Volume Relationship for Highly-ordered Polymers Induced by Solids in Water	181	
H. Otsuka and T. Otsuka		

<b>Photopolymerization of <math>\alpha</math>-Methylstyrene in the Presence of a) Benzoin as Initiator + Catalyst, and Benzoin + Benzoin Acrylate Initiators</b>	555
<b>E. Eren and C. Dincer</b>	
<b>Photopolymerization of the Methyl Methacrylate-<math>\alpha</math>-Methylstyrene and Styrene-Methyl Methacrylate Systems</b>	575
<b>P. P. Wei, B. H. Chen, and H. P. Chen</b>	
<b>Asymmetrical Substitution and the Selectivity of Acid-Catalyzed Reactions for Stereoregularities</b>	593
<b>E. Kricheldorf and H. G. Elias</b>	
<b>Acid-Catalyzed Polymerization of Ethyl Acrylate Initiated by Various Salts at 50°C</b>	615
<b>H. J. Wesselschmidt and G. J. Moore</b>	
<b>Free Radical Polymerization Kinetics: Application to A. Bimolecular Reaction</b>	631
<b>S. Hwang, H. H. Kuo, and L. J. Fetters</b>	
<b>Free Radical Polymerization Kinetics: the Homopolymerization and Chain-Transfer Systems of Quaternary Compounds</b>	655
<b>M. H. Chow and W. J. Flanagan</b>	
<b>Effect of Acid Catalysts and Acid Concentrations on the Polymerization of <math>\alpha</math>-CH<sub>3</sub></b>	675
<b>P. J. Flory and H. G. Elias</b>	





# JOURNAL OF SOLUTION CHEMISTRY

Vol. 14, No. 1	CONTENTS	August 1985
<hr/>		
Management Structure: Clinical Support System (a) Conceptualized and (b) Evaluated and F. J. Rogers		791
Polymers: Molecular Weight Distribution Comparison with the Polypropylene-Block-Copolymer Series J. E. McGrath, J. C. Moore and R. J. Ceresa		807
Modeling Changes in the Equilibrium Phase Composition of Polymer Solutions (PVC) H. J. Cantow and J. C. Moore		823
Preparation of $\alpha^2$ and $\beta^2$ Isotopes: Polymerization of Ethylene, Propene, and Other Olefins Using Analysis H. J. Cantow, J. C. Moore, R. J. Ceresa		839
With Studies in Polymerization of Various Olefins in Solution of a Polypropylene-Block-Copolymer and Some Polypropylene Polymers H. J. Cantow, J. C. Moore, R. J. Ceresa, A. J. Ceresa		855
Isotopic Analysis and Equilibrium of LLP Polymerization: A Key to Polymer Structure (PVC) and Other Polymers H. J. Cantow, J. C. Moore and R. J. Ceresa		871
Isotopic Analysis for a Polymer - A Method of Polymer Structure: With Polymerization, Propene and Ethylene: With Polymerization of $\alpha^2$ , $\beta^2$ and $\gamma^2$ H. J. Cantow, J. C. Moore and R. J. Ceresa		887
Isotopic Analysis: Key to Polymerization of Polypropylene-Block-Copolymer H. J. Cantow, J. C. Moore and R. J. Ceresa		903

# JOURNAL OF SOLUTION CHEMISTRY

Vol. 22, Nos. 1-2 0730-6419(1993) September 1993

<b>A Thermodynamic Treatment of Binary Solutions of Gases in Liquids</b> by S. Sano J. H. Drenth and J. H. Drenth, Jr.	101
<b>The Solubility and Activity Coefficients of Gases in Polar Liquids: Carbon Dioxide, Nitrogen, and Oxygen</b> by S. Sano, J. H. Drenth, and J. H. Drenth, Jr.	117
<b>The Solubility of Gaseous Hydrogen in <math>\text{H}_2\text{O}</math> and <math>\text{H}_2\text{O}_2</math> Solutions at 25°C</b> by J. H. Drenth, J. H. Drenth, and J. H. Drenth, Jr.	133
<b>First and Second Thermodynamic Mixing Functions of Gaseous Hydrogen in <math>\text{H}_2\text{O}</math> and <math>\text{H}_2\text{O}_2</math> Solutions at 25°C</b> by J. H. Drenth, J. H. Drenth, and J. H. Drenth, Jr.	149
<b>Index</b>	165

# JOURNAL OF SOLUTION CHEMISTRY

Vol. 22, No. 10	CONTENTS	October 1995
<hr/>		
Resonance, Charge Delocalization and Substitution of Acyl-Functionalized Carboxylic Acidophenylamines Through Dynamic Equilibria	833	
By Robert J. Macosko and David		
First Synthesis of Alkaloids in Aqueous Solution in the Temperature Range from 1 to 100°C	845	
By J. Kikukawa and H. L. Plesner		
Thermodynamic and Kinetic Studies of 1,2-Bis(hydroxyethyl)- 4,4'-Bis(hydroxyphenyl)butane Systems	857	
By David G. Gray		
Characterization of the Substitution of Acetyl Groups in Polyacrylate by Hydroxyethyl Methacrylate in the Presence of an Emulsifier	869	
By Robert Gray		
Radical Polymerization of Methyl Methacrylate in Water Using a New Type of Cationic Emulsifier	881	
By J. J. Wang and		
Radical Polymerization of Methyl Methacrylate in Aqueous Solution in the Presence of a New Type of Cationic Emulsifier	893	
By J. J. Wang and		
Radical Polymerization of Methyl Methacrylate in Aqueous Solution in the Presence of a New Type of Cationic Emulsifier	905	
By J. J. Wang and		



